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June 3, 1998

Via Hand Delivery

Magalie Roman-Salas, Secretary  
Federal Communications Commission  
1919 M Street, N.W., Room 222  
Washington, D.C. 20554

Re: Ex Parte File Nos. 48-SAT-P/LA-97, 89-SAT-AMEND-97, RM No. 9147

Dear Ms. Salas:

On June 3, 1998, Mark MacGann and Guy Christiansen of SkyBridge L.P. and Jeffrey H. Olson and Diane C. Gaylor of Paul, Weiss, Rifkind, Wharton & Garrison, met with Rebecca Arbogast, Thomas S. Tycz, Kimberly M. Baum, Julie Garcia, and Alexandra Field of the International Bureau, for the purpose of discussing the recently-announced changes to the SkyBridge constellation. The attached handouts were distributed at the meeting.

Please contact the undersigned if you have any questions.

Respectfully submitted,

*Diane C Gaylor*  
Diane C. Gaylor

Attachments

cc: Ms. Rebecca Arbogast  
Mr. Thomas S. Tycz  
Ms. Kimberly M. Baum  
Ms. Julie Garcia  
Ms. Alexandra Field

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**FOR IMMEDIATE RELEASE**

**SKYBRIDGE WILL EXPAND ITS SATELLITE CONSTELLATION  
FROM 64 TO 80 SATELLITES TO MEET MARKET DEMAND**

**Washington, D.C., June 1, 1998** -- SkyBridge Limited Partnership, a satellite-based telecommunications system providing global broadband access via local operators, today announced that it is increasing its global system capacity by almost 50 percent. The growth from 144 Gbps to over 200 Gbps will enable SkyBridge to serve over 20 million users worldwide when the full system is operational. Service will begin in 2001.

The decision to expand the constellation was made in light of the results of global market studies which estimate that the market for broadband services will be approximately 400 million users by 2005, a substantial portion of which will use satellite technologies.

All of the major design characteristics of the SkyBridge system have been maintained. The increase in the number of satellites, resulting in more satellites in view from any given point on the earth, allows for an increase in capacity without modifying any of the system's original technical and service objectives. In particular, the expanded system will continue to avoid all harmful interference to satellite and terrestrial communications systems.

"Our market forecasts and the conclusions drawn from meetings we have had with telecom operators from around the world convinced us that the demand for bandwidth will be far higher than we had originally anticipated," said Pascale Sourisse, President and CEO of SkyBridge. "By taking the decision to expand the constellation now, we are minimizing the impact on system cost, keeping it under 4.2 billion dollars; a 20% increase in system cost results in a 50% increase in capacity. The resulting configuration boosts predicted revenue streams dramatically and makes SkyBridge even more compelling."

According to Mrs. Sourisse, "This decision was taken, in consultation with our strategic partners, during the final phase of the system design optimization process, prior to entering the construction phase. It is fully in line with our development roadmap."

A large industrial team is now in place under the leadership of Alcatel to design and develop SkyBridge. More than 400 engineers currently work on the program. These large-scale engineering activities have enabled SkyBridge to finalize the design characteristics of the system.

**Editor's notes**

Alcatel is the General Partner of SkyBridge LP. The other partners of SkyBridge include the following group of leading industrial companies: Loral Space & Communications of the United States; Toshiba Corporation, Mitsubishi Electric Corporation and Sharp Corporation of Japan; SPAR Aerospace Limited of Canada; Aerospatiale and CNES of France, and SRIW, a Belgian investment entity.

Based on a constellation of 80 Low-Earth-Orbiting (LEO) satellites, SkyBridge will deliver global connectivity to business and residential users worldwide with performance comparable to that of future terrestrial broadband technologies:

- downstream speeds of up to 20 Mbps and up to 2 Mbps on the return link per residential user;
- any multiple of this capacity will be provided to business users.

SkyBridge will complement and extend terrestrial networks and help them solve the "last mile" problem by providing an instant broadband connection to users that previously only had narrowband access.

The SkyBridge system will optimize the use of the radio frequency spectrum by operating in the Ku-band, while fully protecting geostationary satellite systems and terrestrial services within the Ku-band through an innovative frequency re-use concept. The 1997 World Radiocommunication Conference approved this approach.

SkyBridge services will be delivered locally through national and regional telecommunications operators and other service providers.

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**SkyBridge** is a Delaware Limited Partnership headquartered in Washington, D.C. The Federal Communications Commission has accepted its application for a US license for filing.

**Contacts:**

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## SkyBridge Constellation Change Fact Sheet

On June 1, SkyBridge announced a change to its Ku-band NGSO FSS system. The system **will** now have 80 satellites, increasing SkyBridge's global capacity from 144 Gbps to 215 Gbps. The new system capital investment is estimated to be \$4.2 billion (as compared to \$3.5 billion for the old constellation) -- a 20% increase in system cost for a 50% increase in system capacity.

**Only the constellation parameters have changed.** The new constellation is described in the table below.

Old Constellation	New Constellation
64 satellites in two identical Walker sub-constellations of 32 satellites each	80 satellites in two identical Walker sub-constellations of 40 satellites each, creating a single 80-satellite Walker constellation
8 planes of 4 satellites each, per sub-constellation	20 planes of 4 satellites each
55° inclination angle	53° inclination angle
1457 km altitude	1466 km altitude

**The radio transmission parameters are not changed.** Each spot-beam is exactly the same as before. The power levels and EIRPs, the link budgets, the earth station and satellite antennas, and the spot-beam size, are all the same as under the old constellation. Although more satellites will be used, the maximum number of spot-beams that can be generated by each satellite will be reduced from 45 to 18.

**The sizes of the "non-operating" zone and minimum elevation angles are not changed.**

Because the radio transmission parameters and the mitigation techniques are not changed, **the small increase in the number of satellites does not affect SkyBridge's ability to protect GSO and FS systems.** Furthermore, the SkyBridge system will continue to meet the WRC-97 provisional epfd, apfd, and pfd limits.